

# DOCKETED

IN THE UNITED STATES DISTRICT COURT FOR THE  
SOUTHERN DISTRICT OF NEW YORK

MIDWAY MANUFACTURING COMPANY: Deposition of  
vs. : Joseph Aubrey Frisbie,  
THE MAGNAVOX COMPANY : Jr.  
and : 74 Civ 1657 CBM  
SANDERS ASSOCIATES, INC. :  
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IN THE UNITED STATES DISTRICT COURT FOR THE  
NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

THE MAGNAVOX COMPANY, et al : Consolidated Actions  
vs. : 74 C 1030 ✓  
BALLY MANUFACTURING : 74 C 2510 ✓  
CORPORATION, et al : 75 C 3153  
75 C 3933  
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Deposition taken pursuant to  
subpoena and notice at the Sanders Associates, Inc.,  
Headquarters, Spit Brook Road, Nashua, New Hampshire;  
Monday, April 26, 1976; commencing at ten o'clock in the  
forenoon.

FILED

OCT - 8 1976

ERNEST W. NOLIN & ASSOCIATES

General Stenographic Reporters

369 ELGIN AVE., MANCHESTER, N. H. 03104

TELEPHONE: 623-6906

H. STUART CULBERTSON, CLERK  
UNITED STATES DISTRICT COURT

ORIGINAL

Q. Now, I believe I recall: PRESENT:

A. Yes, I recall your For Midway Manufacturing Company,  
Bally Manufacturing Corporation  
and Empire:

Q. Where do you live, Mr. Donald L. Welsh, Esq., 135 South  
A. LaSalle Street, Chicago, Illinois  
LaSalle Drive, Northbrook, Illinois.

Q. Are you employed?  
A. For Atari, Inc.:

A. Yes.  
Q. Do you?  
A. Flehr, Hohbach, Test, Albritton  
& Herbert, by Edward S. Wright,  
Esq., 160 Sansome Street,  
15th Floor, San Francisco,  
California.

Q. Sanders Associates.

Q. In what capacity are For Sanders Associates, Inc.,  
and Magnavox Company:

A. I am systems software  
Q. How long have you been  
A. Theodore W. Anderson, Esq.,  
77 West Washington Street,  
Chicago, Illinois.

Q. I guess about four to For Sanders Associates:

Q. What are your duties  
A. Louis Etlinger, Esq., and  
Richard I. Seligman, Esq.,  
Daniel Webster Highway, South,  
Nashua, New Hampshire.

Q. Your primary responsibilities are the various

Stenotype Reporter:  
software on our two machines, the 322 and

Ronald J. Hayward  
the 322 system.

Q. Are there JOSEPH AUBREY FRISBIE, Jr. or other

called as a witness, being first duly sworn, was examined  
and testified as follows:

Q. (Interrogatories by Mr. Welsh.)-10?

Q. What is your full name?

*Call to the Jury 21 May 76*

A. Joseph Aubrey Friskie, Jr.: the 370 system?

Q. How do you spell your last name?

A. F-r-i-s-b-i-e. of some department at Sanders?

Q. Where do you live, Mr. Friskie? -es division.

A. Matthew Drive, Merrimack, New Hampshire.

Q. Are you employed? director, Hank Brodie.

A. Yes. at Sanders do you work physically?

Q. By whom? headquarters building.

A. Sanders Associates. headquarters building?

Q. In what capacity are you employed by Sanders?

A. I am systems software manager.

Q. How long have you held that position?

A. I guess about four to five years now.

Q. What are your duties in that position?

A. Running a department of about, say, a dozen people.

A. My primary responsibilities are the systems

software on our two machines, the PDP-10 and

A. the 370 system facility. There are many computers.

Q. Are these computers of manufacture of other

A. companies? off hand. Some of them I can mention.

A. Yes. PDP-11, Hewlett-Packard, Varian.

Q. Of whose manufacture is the PDP-10? as to what

A. Digital Equipment Corporation. position as.

*W. H. Jr. 28 May 76*

Q. And of whose manufacture is the 370 system?

A. IBM. I direct the activities of the department.

Q. Are you a part of some department at Sanders?

A. I am part of the computer sciences division.

Q. To whom do you report??

A. To the divisional director, Hank Brodie. Under my

Q. Where at Sanders do you work physically?

A. In the Headquarters building. you programmers?

Q. And where in the Headquarters building? programmers.

A. The north wing, basement. for Sanders?

Q. Are both computers located there?

A. Yes. position did you hold prior to becoming

Q. Does Sanders have any other computers?

A. Yes. a supervisor of Tele Communications Section.

Q. Do you have anything to do with those?

A. No. supervisor of Tele Communications section.

Q. Where are they located? that job?

A. Throughout the facility. There are many computers.

Q. What computers are they? division or department?

A. I don't know offhand. Some of them I can mention.  
The PDP-11, Hewlett-Packard, Varian.

Q. Could you be a little more specific as to what  
your duties are in your present position as

A. systems software manager?

A. I guess I direct the activities of the department.

A. This constitutes normal administration-type activities.

Q. Assign jobs and so forth?

A. To assign jobs, yes, to various people under my direction, communications section?

Q. Are the persons who work under you programmers? in

A. Yes, they would be considered senior programmers.

Q. How long have you worked for Sanders?

A. Since December of 1966, communications?

Q. What position did you hold prior to becoming systems software manager?

A. I was a supervisor of Tele Communications Section.

Q. I didn't get that, excuse me?

A. Supervisor of Tele Communications section, find out.

Q. How long did you hold that job?

A. About two years. activities is one example.

Q. Was that a part of some division or department?

A. That was part of the Corporate System Software Department. I think we're far afield. I see no

Q. Was that department a part of the computing sciences division?

MR. WELSH: Just to make the

A. Yes.

Q. Whom did you report to in that position?

A. The person's name?

Q. Yes.

A. Michael O'Connell.

Q. And what were your duties as supervisor of the Tele Communications section?

A. Let's see, direct the activities of two people in the development of communications, tele communications-type software.

Q. What do you mean by tele communications?

A. It is the use of communications for the transfer of computer-oriented information.

Q. What types of communications?

A. I guess I don't understand.

Q. Well, I don't either, I am just trying to find out. You say communications, telephone?

A. Common carrier facilities is one example.

Q. That was something you actually worked with?

MR. ANDERSON: Well, I object, Mr. Welsh, I think we are far afield. I see no relevance whatsoever.

MR. WELSH: Just to make the



record clear, I didn't know what tele communications he was referring to and I think it is just so the record is clear.

Q. Could you explain to MR. ANDERSON: Well, read the question again, please? Machine A to Machine B.

Q. What computers did you work with in the tele communications section?

(Whereupon, the previous question was read back

A. PDP-10, 370, Sandac 20.

by the reporter.)

Q. Of whose manufacture was the Sandac 20?

A. Sanders Associates. THE WITNESS: Yes.

Q. And what common carriers did you work with?

A. Bell Telephone, certainly the local offices.

Q. Did you work with any other types of communications?

A. Yes. quarters building.

Q. What? same location?

A. Yes.

MR. ANDERSON: Again I object;

Q. I see no relevance at all to what kind of supervisor communications this witness worked with in a

two-year period of time that he testified to or

a period of time when he testified that he was

in the tele communications group.

A. MR. WELSH: You may answer

the question. MR. WELSH: You may answer the question.

A. I was an application programmer. MR. ANDERSON: You may answer.  
Q. For what period? THE WITNESS: I guess it was  
A. Sanders developed.  
Q. Could you explain that to me? A. One year?  
A. Stringing a wire from Machine A to Machine B.  
Q. What computers did you work with in the tele  
A. communications section?  
A. PDP-10, 370, Sandac 200.  
Q. Of whose manufacture was the Sandac 200?  
A. Sanders Associates.  
Q. Where among the Sanders facilities did you do  
A. your work as supervisor of tele communications  
Q. section? A. Headquarters building.  
Q. The same location? A. Yes.  
Q. What did you do prior to your work as supervisor  
A. of tele communications section?  
A. I was a software programmer in that same group or  
A. section.  
Q. For how long did you hold that position?  
A. About a year or so.  
Q. Did you have another position at Sanders prior to that?



A. I was an applications programmer.

Q. For what period?

A. Approximately a year.

MR. ANDERSON: One year?

THE WITNESS: Approximately.

Q. Did you hold any other positions prior to that?

A. No.

Q. What computers did you work with as a software programmer in the tele communications group?

A. The IBM machines and the DEC machine.

Q. The PDP-10?

A. Yes.

Q. And when you were applications programmer, what computers did you work on?

A. The IBM machines. That is all. When I use the words "IBM machines," I am referring to 360's as well.

Q. Are you familiar with a PDP-1 computer manufactured by Digital Equipment Corporation?

A. Yes.

Q. When did you first become familiar with that?

MR. ANDERSON: I object. You

mean as a piece of equipment that DEC made or

existed, is that your question?

Q. Now did you understand MR. WELSH: Yes, he said he was familiar with it and I asked him when he first became familiar with it.

A. I can't name someone THE WITNESS: I guess around the 1968 or '69 time frame.

Q. In your work as a software programmer, were you also located here in the Headquarters building?

A. Yes. Excuse me - yes, as a software programmer.

Q. Then in your work as an applications programmer, where were you located? building?

A. Canal Street. Can you put into use?

Q. How did you first become familiar with the PDP-1

A. computer of Digital Equipment Corporation? used.

A. I saw it shipped here. What?

Q. That was a specific PDP-1 computer? I object.

A. Yes. Answered the question. He mentioned that it

Q. And where did you see it shipped to?

A. To the Headquarters building here. And when it was

Q. In the computer sciences division?

A. Yes.

Q. Where did the computer come from? could not be

A. I don't know specifically. I understand it came

from Bedford.

Q. How did you understand that?

A. Through conversation.

Q. With whom?

A. I can't name someone specifically, but people within the division.

Q. Did anyone accompany the PDP-1 when it was brought from Bedford?

A. I don't know.

Q. Was the PDP-1 put into use when it was brought here to the Headquarters building?

A. What do you mean by put into use?

Q. Well, was it just stored or was it actually used?

A. Let's see, it was put into condition to be used.

Q. What do you mean by that?

MR. ANDERSON: I object, he answered the question. He mentioned that it was put into condition to be used.

Q. Was it not in a condition to be used when it was brought here?

A. Yes.

Q. What was wrong with it so that it could not be used?

A. When a computer goes through shipping, it is dismantled usually and it requires a maintenance crew to install it.

Q. Were these maintenance crews from DEC?

A. Yes.

Q. Is that what you meant by putting the PDP-1 into condition for use; that is, installation by maintenance crews from DEC?

A. Yes.

Q. After it was put into condition for use, was it used?

A. Yes.

Q. To what use was it put?

A. Nonspecific use.

Q. Any use that you know of?

A. No.

Q. Was the PDP-1 located in the same facility where you worked?

A. Yes.

Q. Did it just sit idle?

A. No.

Q. Then somebody used it?

A. Yes.

Q. Who used it?

A. I don't know.

Q. Do you know of any use to which it was put?

A. No.

Q. Do you have any idea or belief as to what use the PDP-1 computer was put to?

A. It was a nonspecific use.

Q. And what was that?

A. I guess anybody that wanted to use it for something could.

Q. Did you ever use it?

A. No.

Q. Are you acquainted with a Ted Mairson?

A. Yes.

Q. How are you acquainted with him?

A. He currently works for me.

Q. How long has he worked for you?

A. About six months.

Q. Were you acquainted with him prior to that?

A. Yes.

Q. How?

A. Various capacities.

Q. What were they?

A. He was a former manager of a department.

Q. What department?

A. Corporate computation and analysis.

Q. Were you acquainted with him in any other way?

A. No.

Q. For how long were you acquainted with him in that capacity?

A. It is difficult to say; I don't recall specifically.

Q. A year or two?

A. About a year or two, yes.

Q. Did he also work in the Headquarters building in the computer facility?

A. At that time?

Q. At the time that you were acquainted with him.

A. Yes.

Q. Does that facility have a general name or is it the computer sciences division?

A. Corporate computer sciences division is the official name.

Q. Does the space where the computers are located have any particular designation?

A. Computer room.

Q. Were you acquainted with Mr. Mairson prior to



the time that he was manager of the department?

A. No.

Q. So you have only known him about two and a half years?

A. No.

Q. At the most?

A. No, I have known him longer than that. I can't recall specifically when he was manager of that department. I would say somewhere in the neighborhood of three or four years.

Q. Did you ever have occasion to work with him?

A. Yes.

Q. When was that?

A. Within the last six months.

Q. When he has been working under you?

A. Yes.

Q. Have you had any occasion to work with him at any other time?

A. Just as a department manager when he held that position.

Q. What department did he manage again?

A. Corporate computer<sup>ATIONAL</sup> ~~analysis and computation.~~

Got

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MR. ANDERSON: You already asked that question and it was answered.

Q. How about Gordon Green, are you acquainted with him?

A. No. I met him today for the first time, that I can recall, anyhow.

Q. Had you seen him before today?

A. I think I may have.

Q. Did your work with Mr. Mairson when he was department manager involve computers or any computer?

A. I guess I need an explanation, what do you mean by that?

Q. Well, when you worked with him, did it involve a computer such as the PDP-10?

A. MR. ANDERSON: Well, I object; I don't think that he testified that he worked with Mr. Mairson at that time. You asked him whether he knew Mr. Mairson and he said that he knew him as of that time. That is what my notes indicate.

Q. Did you work with Mr. Mairson?

A. I worked with Mr. Mairson as, say, a fellow department manager.

- Q. Could you be more specific as to what that work involved?
- A. That would be resolving departmental differences working on division plans as they relate across departmental bounds, administrative functions, things of that nature.
- Q. How long was the PDP-1 in use after it was conditioned to be used?

MR. ANDERSON: I object to the question as vague and ambiguous. He didn't say that there was any continuity of use at all and there is no foundation at all for the question. All he said is that it was used. That he never used it and that it was a nonspecific use.

MR. WELSH: You may answer the question.

MR. ANDERSON: If you can, you may answer the question.

THE WITNESS: Would you repeat it, please?

(Whereupon, the previous question was read back by the reporter.)

Q. I will ask another question. Is the PDP-1 still in use?

A. No.

Q. Is it still located here at Sanders?

A. Yes, to the best of my knowledge.

Q. Where is it located?

A. The last time I saw it, which was in October of '75, it was located in a storeroom in the north wing.

Q. Do you know when it was put there?

A. Not specifically.

Q. Do you have any idea?

A. A year or two years ago.

Q. Was it used up to that time?

A. It was available for use, so I don't know.

Q. Did you have anything to do with the PDP-1 being taken out of use?

A. Not directly.

Q. Did you have anything to do with it indirectly?

A. Management meetings, the topic came up and I was one of many poled to determine if I had a specific use for it or any suggestions as to what to do with it.

Q. And what did you reply?

A. I have no use for it.

Q. Was a decision made at any of those meetings to put it out of use?

A. What do you mean by put it out of use?

Q. Well, you said it was used until it was put in the storeroom?

MR. ANDERSON: I object, the witness did not say that. He said that it was available for use until it was put into the storeroom. There is no testimony of use or continuity of use at all.

Q. Was a decision made at any of the meetings to put the PDP-1 into the storeroom?

A. I did not make the decision, so I don't know exactly when the decision was made; but during conversations and meetings, it was determined that no one had a specific use for it and in that sense the decision was made.

Q. You stated that the PDP-1 was available for use before it was put into the storeroom. Was it actually used prior to that time?

A. I don't know specifically.

- 5
- Q. Was it where you could observe whether it was being used or not?
- A. I have seen people working on it.
- Q. Prior to the time it was put in the storeroom?
- A. Prior to the time.
- Q. Did you have anything to do with putting the PDP-1 into the storeroom?
- A. Just as I mentioned before.
- Q. Just attending the meetings?
- A. Yes.
- Q. Did you ever have any responsibility at all with respect to the PDP-1?
- A. No specific assigned responsibility.
- Q. Did you have any general responsibilities in any supervisory position?
- A. Just a member of the division.
- Q. What responsibility was that?
- A. Working with the director, of course, for joint decisions, that type of thing.
- Q. What were the circumstances under which you last saw the PDP-1 in October, 1975?
- A. I believe I mentioned in the storeroom.
- Q. Yes, in the storeroom.



A.. What do I mean by what condition?

Q.. Did you have any particular reason for observing the PDP-1 at that time?

A. Yes.

Q.. What was that?

A. The patent department had requested any information that was available on a thing called Space War.

Q. By whom was the request made?

A. Mr. Etlinger.

Q. To whom was it made?

A. To me.

Q. How was the request made?

A.. By telephone and conversation.

Q. Face to face?

A.. Both.

Q. What did Mr. Etlinger say?

A. I don't remember his exact words, but something to the effect, do you know anything about Space War.

Q. That was over the telephone?

A. Yes.

Q.. Did he state why he called you?

A. He said it had something - why did he call me?

Q. Yes.

A. I don't think so, no.

Q. Do you have any idea as to why you were the person of whom the request was made?

A. Probably because of my position in the department or the division.

MR. ANDERSON: Would you read that question and answer back, please?

(Whereupon, the previous question and answer were read back by the reporter.)

Q. Did Mr. Etlinger state why he desired to know whether you knew anything about Space War?

A. In that conversation?

Q. Any conversation.

A. Yes.

Q. What did he say was the reason?

A. It had to do with a patent infringement.

Q. Was it more specific?

A. I don't believe so.

Q. Did he state whose patent or patents were involved?

A. He just said that Sanders was involved.

Q. Did he state what the subject matter was?

A. It had to do with, I guess it was, TV games.

Q. How many conversations did you have with Mr. Etlinger either by phone or face to face?

MR. ANDERSON: At that time?

MR. WELSH: At any time regarding Space War.

THE WITNESS: I don't remember.

Q. Was it ten?

A. Approximately.

Q. When was the first request?

A. I don't remember. I actually, I don't remember.

Q. Or first conversation?

A. I don't remember.

Q. When he asked you if you knew anything about Space War, what was your reply?

A. I said I had heard of it.

Q. Is that all?

A. Yes.

Q. Did he ask you any further questions as to where you had heard of it and when and so forth?

A. Yes. About Space War.

Q. What were your replies to those questions?

A. I had heard about it at Sanders and I don't specifically know when.

Q. When did you first hear of Space War?

A. I don't know specifically.

Q. When generally?

A. Around somewhere between 1968 and 1970.

Q. How did you first hear of it?

A. Through conversation.

Q. Where? computer was done on the IBM-1, or 11?

A. In the division.

Q. What persons were involved in the conversation?

A. I don't remember specifically, but generally John Sauter.

Q. Any others?

A. Mal Lemaire.

Q. Did this take place at Sanders?

A. Yes.

Q. Where?

A. In the division.

Q. That is the computer sciences division?

A. Yes.

Q. What about Space War did you first hear?

A. Well, I guess I don't understand.

MR. ANDERSON: I object to

the question.

Q. Well, when you say you first heard about Space War, what did you first hear about it?

A. What did I hear about it?

Q. Yes.

A. It was a game.

Q. What kind of a game?

A. It is a computer game played on the PDP-1, on the display of the PDP-1 specifically.

Q. What display did the PDP-1 computer at Sanders at that time have?

MR. ANDERSON: At what time;

I object.

did it come up at the MR. WELSH: At the time he discussed it.

MR. ANDERSON: Well, I object, you have no foundation for that question.

Q. Strike the question. What display were you referring to?

A. Displays on the PDP-1.

Q. Did that have some identifying number or name?

MR. ANDERSON: I object, at

what time?

MR. WELSH: He is referring to a specific display on the PDP-1.

MR. ANDERSON: Whether he heard that in this conversation that he generally recalls from the period of '68 to '70?

MR. WELSH: No, he referred to a display and I am asking if he knows of any identifying number or a number?

MR. ANDERSON: Well, I object; do you mean that came up in this conversation in '68 to '70?

MR. WELSH: Yes.

MR. ANDERSON: In other words, did it come up at that time? Did somebody say in that conversation what display specifically was employed?

MR. WELSH: No, I didn't ask that question. I asked what the display he was referring to was.

MR. ANDERSON: Well, he was referring to a general conversation that he generally recalls that involves some people, probably



including Mal Lemaire and John Sauter; now, do you want to know what they told him at that time, Mr. Welsh? If not, there is no foundation that he had any knowledge. Or do you mean what there was in it when it came and he saw it here in the storeroom?

Q. At the time you had the conversation in which you first heard of Space War, was the PDP-1 computer then located at Sanders in Nashua, here?

A. Yes, after with a...

MR. ANDERSON: And by here, you mean in south Nashua, I take it?

MR. WELSH: That is where he said the PDP-1 was brought.

Q. Did that PDP-1 have a display?

A. Yes.

Q. Did it have some identifying number or name?

A. I don't know. I question if it doesn't - it was...

Q. Is the name Type 30 display familiar to you?

A. I don't know.

Q. Was anything else said about the game Space War when you first heard about it other than it was a game played on the PDP-1 display?

A. Fun to play.

Q. Was it demonstrated to you?

A. No.

Q. Have you ever seen Space War played on a PDP-1?

A. Not to my recollection.

Q. Then I take it you have never played Space War on a PDP-1?

A. Correct.

Q. Have you ever seen Space War played on any other computer with a display?

A. Not that I am aware of.

Q. Is it correct, then, that you have never seen Space War played?

A. Not under that name.

Q. Have you seen Space War played under another name?

MR. ANDERSON: Well, I object to the question. How would the witness be able to answer that question if he doesn't - if he hasn't seen Space War? I don't know how he would relate it to something else under another name. I think you should ask a proper and specific question.

MR. WELSH: Well, he said not

under that name.

Q. Under what name have you seen it played?

MR. ANDERSON: Well, I object to the question. There has been no testimony that he saw it played under some other name. He just said he has not seen a game played under the name Space War.

Q. Have you seen any other games played on computers with displays?

A. Yes.

Q. What other games?

A. I think they were referred to as ping pong, tennis, those types of games. Chess, tic-tac-toe.

Q. Any others?

A. Not that I can recall.

Q. Did any details of what the Space War game consisted of come to light in your discussions or a discussion at Sanders when you first heard of Space War?

A. What do you mean by details?

MR. ANDERSON: And come to light?

Q. What the observer or player saw on the screen of the cathode ray tube.

A. Yes.

Q. And what were you told that the observer saw when Space War was played?

MR. ANDERSON: I object to the question as being hearsay.

Q. You may answer.

A. A rocket ship that the operator manipulated through a two-dimensional space and they "shot at each other."

Q. So there was more than one ship?

A. Two ships, I believe, that is what I heard.

Q. Were you told what they shot at each other with?

MR. ANDERSON: Same objection.

THE WITNESS: No.

Q. Have you ever seen any game similar to that in which a player operates a ship or some similar image that shoots something at another image?

MR. ANDERSON: You mean in any context or do you mean in a CRT display?

MR. WELSH: The same context we have been discussing.

MR. ANDERSON: In computers?

MR. WELSH: Any CRT display.

THE WITNESS: I guess - what

do you mean by shoot?

Q. Well, what I understood you to mean when you describe the operators manipulating rocket ships that shoot at each other.

A. Not having seen it, I assume that the shot emanates from the source to the target. I have not seen any other game like that.

Q. In which that type of display exists?

A. Because again having observed the tennis, the ball is an independent item.

Q. Where did you first observe - strike that. You said first ping pong, tennis and similar games; did you intend to group those as one type of game on a cathode ray tube?

A. Not necessarily.

Q. When did you first see a ping pong game on a cathode ray tube?

A. I don't know specifically.

Q. How about generally?

A. Several years ago.

Q. Where did you see that?

A. At one of the local malls. A television marketing

type.

Q. Did you ever see such a game played on a display - a cathode ray tube associated with a computer?

A. I assumed - excuse me, I guess you need to define computer for me.

Q. A general purpose computer such as the PDP-1.

A. All right; would you ask the question again, then?

(Whereupon, the previous question was read back by the reporter.)

D. YOU REQUESTED TO REPHRASE THE QUESTION.

Q. I will rephrase the question. Did you ever see a ping pong game played on a cathode ray tube associated with a general purpose computer?

A. Not that I am aware of.

Q. Did you ever see it played on a cathode ray tube associated with a special purpose computer?

A. I assume commercially available games are played with a special purpose computer, so the answer is yes.

Q. With respect to the tennis game you recall having seen on a cathode ray tube, where did you see that?



A. I don't recall the specific - the first specific incident. The one in the mall, the Nashua Mall would probably be one of the earliest.

Q. Was that a game in which a player inserted a coin?

A. Yes.

Q. Was the same thing true of the ping pong game which you spoke of?

A. Yes and no. I have seen ping pong games under both. I was not referring to a specific ping pong game.

Q. When you referred to having seen a ping pong game played several years ago at a local mall of a TV marketing type - - -

Q. What do you mean by TV marketing type?

A. I thought it was a phrase you used.

Q. Was the ping pong game which you first saw several years ago at the Nashua Mall a coin-operated game?

A. Yes.

Q. You stated that you had also seen a ping pong game on a CRT that was not coin-operated?

A. Yes.

Q. Where did you see that?

A. I don't recall specifically, but I have seen them, for instance, in Sears and Magnavox. The home television type. You know, Christmas type of promotions.

Q. And when did you first see that?

A. I don't recall.

Q. Was it before or after you saw the coin-operated ping pong game?

A. I don't recall.

Q. When did you first see a game of chess played on a cathode ray tube?

A. I guess my best recollection would be when Fisher beat Spasky.

Q. Was that then on a regular television set as part of a broadcast?

A. Yes.

Q. Did you ever see chess played on a cathode ray tube associated with a computer?

A. Not to my recollection.

Q. When did you first see tic-tac-toe played on a cathode ray tube?

A. I guess at the Science Museum in Boston.

Q. When was that?

A. Maybe four years ago.

Q. What type of computer was it?

MR. ANDERSON: I object to the question as being ambiguous. Do you mean the manufacturer or whether it was a general purpose or special purpose or the model number or what?

MR. WELSH: Anything he knows about it.

MR. ANDERSON: So the question is, then, what does he know about the computer that he saw at the Science Museum in Boston about four years ago playing tic-tac-toe?

THE WITNESS: It was advertised as a general purpose computer. It is part of an exhibit and I don't - the manufacturer is either Honeywell or DEC, but I am not sure.

Q. Did you simply observe the game of tic-tac-toe or participate in the playing of it?

A. Participated and observed.

Q. Have you ever observed or participated in the playing of any other games using cathode ray tubes?

A. Yes.

Q. What other games?

A. I guess it was table tennis.

Q. Any others?

A. The list I mentioned before in terms of observation.

Q. I beg your pardon?

A. The list I mentioned before in terms of observation.

Q. Was the table tennis game you observed a broadcast game observed on a screen of a commercial TV set or was it on a cathode ray tube associated with a computer?

MR. ANDERSON: You mean a general purpose computer?

MR. WELSH: Any kind of a computer.

THE WITNESS: I don't know.

Q. Where did you observe it?

A. Sears Roebuck.

Q. Was there some device attached to a commercial television set on which you observed it?

A. That particular game, I don't recall. It was a TV monitor there, I don't know.

Q. When did you observe that?

A. Within the last year.

Q. Were any manufacturers' names associated with the

CRT or the game as you saw it?

MR. ANDERSON: I object to the question and the line of questioning as irrelevant to any issue in any litigation that this deposition is being taken in.

THE WITNESS: I don't know.

Q. Have you heard of Space War since the first discussion you had between 1968 and 1970?

A. Yes.

Q. When was the next time that you heard of Space War?

A. I don't recall a specific time.

Q. Approximately when?

A. Off and on through the years.

Q. Were you aware of whether or not Space War was being played here at Sanders?

A. Only through conversation.

Q. Here at Sanders?

A. Yes.

Q. And did that conversation indicate that it was being played?

MR. ANDERSON: I object to the question as hearsay.

THE WITNESS: Yes. I have a

question, really. When you make an objection, I assume I answer the question?

MR. ANDERSON: Yes, unless I instruct you not to answer. That is only for later consideration by a judge as to whether it is an admissible question and answer or not.

Q. From whom did you hear about Space War off and on through the years?

A. Lemaire and Sauter and, of course, Etlinger and a fellow named Reiner.

Q. What is Mr. Reiner's name?

A. Matthew Reiner.

Q. Is he an employee of Sanders?

A. Yes.

Q. How are you acquainted with him?

A. What do you mean?

Q. Are you acquainted with him?

A. Yes.

Q. How are you acquainted with him?

MR. ANDERSON: Well, I object; what do you mean by how?

THE WITNESS: In a business sense.

- Q. Does he work under you?
- A. No.
- Q. Does he work in the computer sciences division?
- A. No.
- Q. How did you become acquainted with him?
- A. Just through normal business contacts.
- Q. What position does he hold at Sanders?
- A. He is a programmer.
- Q. You say he did not work for the computer sciences division?
- A. That is correct.
- Q. Where in Sanders is he a programmer?
- A. I am not sure that that is his official title, but he works in the military data systems division.
- Q. What did he have to say to you about Space War?
- A. He told me what he recalled about John Sauter's acquisition of a PDP-11 version.
- Q. What else did he tell you?

MR. ANDERSON: Well, I object on the ground of hearsay.

THE WITNESS: That is about it.

- Q. How did he happen to tell you about that?
- A. I asked him.
- Q. Were you requested to ask him?
- A. Yes and no.
- Q. Could you explain that answer, please?
- A. As I mentioned earlier, Mr. Etlinger asked me to find out what I could about Space War and what we had around the company.
- Q. What did you mean by, no, you were not requested to ask Mr. Reiner about Space War?
- A. I was not specifically asked to go see Mr. Reiner.
- Q. So you went to see him as a part of your response to the general question by Mr. Etlinger, is that correct?
- A. Correct.
- Q. What did Mr. Frisbie say that Mr. Sauter had said about the acquisition of a PDP-11 version of Space War?

MR. ANDERSON: I object to the question as lacking a foundation and hearsay. You said Mr. Frisbie?

THE WITNESS: That was my question.



Q. I will rephrase it. Strike the question. What did Mr. Reiner tell you that Mr. Sauter had said about the acquisition of the PDP-11 version?

MR. ANDERSON: I object to the question as hearsay compounded on hearsay.

THE WITNESS: He said that he had acquired a version which he modified for the PDP-11 using a Sanders display.

Q. Did Mr. Reiner have any or indicate any personal knowledge to you of the playing of Space War on the PDP-11?

A. I don't recall.

Q. Is it correct that you have not seen Space War played on a PDP-11?

MR. ANDERSON: I object, the question has been asked and answered, but you may answer.

THE WITNESS: That is correct.

Q. Did Mr. Reiner say anything else to you about Space War?

MR. ANDERSON: I object on the ground of hearsay.

THE WITNESS: What do you

mean by anything else?

Q. Well, you stated that he advised you as to what Mr. Sauter had said about the acquisition of a PDP-11 version, did Mr. Reiner say anything else such as whether such a version was then available?

A. Yes.

Q. What?

A. He said that he thought he had the source around.

Q. Did you ask him to obtain the source?

A. No.

Q. Did you relay that information to anyone else?

A. Yes.

Q. To whom?

A. To Etlinger. At least Etlinger's office, I should say.

Q. Did you obtain any documents or things relating to Space War from Mr. Reiner?

A. Not that I recall.

Q. What else did you do in response to Mr. Etlinger's request for information available on Space War?

A. Specifically, I talked to Ted Mairson. I also talked to - I queried several of my people to find out if they knew anything about Space War, such as

Lemaire, Perkins.

Q. Lemaire and who?

A. Don Perkins, and I went looking for what was available.

Q. Did you find anything?

A. I found the PDP-1 and a paper tape. The leader on the paper tape said Space War, I believe.

Q. Did you find anything else?

A. Other paper tapes and things laying around.

Q. Relating to Space War?

A. I don't know. In fact, I do not know that the paper tape that said Space War <sup>was</sup> ~~and~~ had Space War on it, I do not know - I did not read the paper tape.

gaf

Q. Where did you find the paper tape which said Space War on it?

A. I believe on the console of the PDP-1.

Q. Was that at the same time that you observed the PDP-1 in the storeroom that you referred to earlier?

A. Yes.

Q. Did you find anything else in your search for information available on Space War?

A. I don't believe so.

*gaf*  
*28 May 76*

Q. Did you talk to anyone else other than Mr. Reiner, Mr. Mairson, Mr. Lemaire and Mr. Perkins?

A. Other than the lawyers?

Q. Yes.

A. Yes, I talked to some <sup>ONE (A)</sup> ~~of our operations-~~ to the operations manager to find out specifically where the PDP-1 was located.

Q. What is his name?

A. I guess that was Roger Lehr.

Q. Did you talk to anyone else?

A. Not that I recall.

Q. What did Mr. Mairson tell you regarding Space War when you talked to him?

MR. ANDERSON: I object on the grounds of hearsay.

THE WITNESS: He told me that he received it with the machine.

Q. The PDP-1?

A. Yes, I assume so.

Q. What do you mean by it?

A. The program.

Q. Did he say what form the program was in?

A. I believe a paper tape.

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290 Q. Did you discuss the paper tapes that you had found with Mr. Mairson?

MR. ANDERSON: Did you say tape?

MR. WELSH: I said tapes because he said he found one tape with he said Space War on it and other paper tapes laying around the PDP-1 console.

THE WITNESS: What was your question again?

291 Q. Did you discuss those tapes with Mr. Mairson or any one of them?

A. I don't recall.

292 Q. Did Mr. Mairson say anything else regarding Space War when you talked to him?

MR. ANDERSON: I object on the grounds of hearsay.

THE WITNESS: What do you mean by anything else?

293 Q. Well, you just stated that he had received the Space War program in the form of a paper tape with the PDP-1 machine, did he tell you anything else about the Space War?

- A. Not that I recall.
- Q. Did you discuss with him how Space War was played or what it consisted of?
- A. No.
- Q. Did you ask him for any documents or things relating to Space War?
- A. Yes.
- Q. Did he give you anything?
- A. No.
- Q. Did he state whether he had anything?
- A. I believe he said he had nothing.
- Q. Did Mr. Lemaire supply any information to you regarding Space War when you talked to him?
- A. What do you mean by supply any information, like paper tapes, things like that?
- Q. Well, did he tell you anything about Space War or supply any documents or things such as a tape?
- A. No.
- Q. Did he state whether he was familiar with Space War?
- A. I guess - I don't recall.
- Q. Do you recall anything about the conversation with him regarding Space War?

A. Basically that he did not know where any of the sources or documentation was; and other than recalling conversations over the years, I don't recall any specific information that he provided.

MR. WELSH: Could I have that answer back, please?

(Whereupon, the previous answer was read back by the reporter.)

Q. Were they conversations that he recalled that you referred to?

MR. ANDERSON: I object to the question, it is hearsay. You have not established that this witness has any knowledge of those conversations at all and you are asking the question in that sense.

THE WITNESS: I guess you are going to have to repeat the question, please?

Q. Well, you stated he supplied no information other than recalling conversations over the years?

A. That he and I had had.

MR. WELSH: I see we have

reached the noon hour, let's break for lunch.

(Whereupon, the luncheon  
recess was taken.)

Q. (By Mr. Welsh) In your discussion with Mr. Perkins when you were seeking information regarding Space War, what did he tell you that he knew about Space War?

A. I guess he did not know where any of the sources were or any of the documentation for it and that it was played on the PDP-1.

Q. Did he indicate whether he had played it?

MR. ANDERSON: I object on the ground that the question asks for hearsay.

THE WITNESS: I don't recall.

Q. Did he provide you with any information regarding Space War?

A. No additional information.

Q. In your search for information regarding Space War in response to Mr. Ettlinger's request, did you turn over any documents or things to him or any people in his department that you had found?

A. Yes.



Q. What did you turn over to him?

A. A paper tape and a copy of the - I think it was the agreement on the purchase of the PDP-1. In fact, it wasn't even really an agreement, it was more like a purchase order or something of that sort. It was a one sheet of paper type thing.

Q. I hand you what has previously been marked as Sander's Exhibit 5 and ask if that is the paper tape which you turned over to Mr. Etlinger?

A. It appears to be.

Q. When did you turn that over to him?

A. I don't recall specifically, but I believe it was in the October, '75, time; and again when I say turn over to Mr. Etlinger, this is his office. I don't know if I specifically turned it over or gave it to him.

Q. In your seeking of information in response to Mr. Etlinger's request, did that activity extend over a period of time or did you do it just once and then stop?

A. Well, it extended over a period of time.

Q. Approximately what period?

A. Off and on for about a week. When I say a week,

I may not have been able to talk to Ted, for instance, the particular day that Mr. Etlinger talked to me, that type of thing.

Q. And did you turn over Exhibit 5 to him at the end of that period?

A. During that period sometime; I don't recall specifically when.

Q. Did you turn over the papers relating to the purchase of the PDP-1 to him at the same time that you turned over the tape, Exhibit 5?

A. The same time period.

Q. I hand you two papers which have been marked as Exhibit 64 and ask if those are the papers you referred to relating to the purchase of the PDP-1?

A. Yes, they appear to be.

Q. Where did you obtain those before you handed them over to Mr. Etlinger or someone from his office?

A. I don't recall specifically. It was either in the files of the operations department or in the division files.

Q. But they were files of Sanders which you examined?

A. Yes. I did not examine the files, I had a

secretary retrieve what information we had relative to the PDP-1.

Q. But these did come from Sanders' files?

A. Yes.

Q. And was the search for them made during that same period when you were interviewing or seeking information regarding Space War?

A. Yes. At that time I was seeking information in regards to the PDP-1, not Space War specifically.

Q. Was that a different period of investigation?

A. No, at the same time, but it was just that the question that I asked related to the PDP-1 rather than Space War specifically.

Q. Did you turn over to Mr. Etlinger the originals of the documents which you found relating to the purchase or were copies made?

A. I don't recall. I do recall I did not have the original. I had a copy similar to this. I don't recall whether I made a copy of the copy or not.

MR. ANDERSON: When the witness said similar to this, he was referring to Sanders' Deposition Exhibit 64.

Q. Do you recall the second of the two pages as being

somewhat illegible?

A. Yes.

Q. In a manner similar to the second of the two pages of Exhibit 64?

A. Yes.

Q. Were the two pages attached together when you first obtained them?

A. Yes.

Q. Did you turn over to Mr. Etlinger in response to his request for information regarding Space War any documents other than the tape, Exhibit 5, or the two sheets, Exhibit 64?

A. Not that I can recall.

Q. Do you have a formal education after high school?

A. Yes.

Q. And what was that?

A. I have an associate degree in science and engineering; a bachelor of science <sup>IN</sup> and management; and an MBA.

Q. From what institution did you receive the associate of science and engineering?

A. I believe it is called Southern Connecticut State College.

*John H. ... 28 May 76*

*John*

Q. Is that a four-year course that you took?

A. That is a two-year course.

Q. Did you obtain a degree of bachelor of science <sup>IN</sup> and management?

A. Yes.

Q. Where did you obtain that?

A. Northeastern University.

Q. When did you obtain that?

A. I completed that about 1972.

Q. 1972?

A. Yes.

Q. When - - -

A. '71 or '72, I am not sure which.

Q. When did you complete your work for an associate of science and engineering?

A. '59.

Q. Where is Northeastern University located?

A. Boston, Massachusetts.

Q. Where did you obtain your MBA?

A. Northeastern.

Q. When did you obtain that?

A. 1975.

Q. Is that a night school?

A

*Detrick Jr 21 May 76*

A. Yes.

Q. Or a correspondence course?

A. No, night school. They run both day and night.

Q. Have you ever visited any computer facility at Massachusetts Institute of Technology?

A. I may have.

Q. Did you ever observe there any demonstration of any program on a computer with a cathode ray tube display?

A. Not that I recall.

Q. Other than the game of tic-tac-toe you referred to, have you ever observed any demonstration program on a cathode ray tube associated with a general purpose computer?

A. Not that I can recall.

Q. Are you acquainted with Mr. Ralph Baer?

A. I have heard the name. I may have met him; I can't visualize him.

Q. Have you ever had any conversations with him?

A. I may have during the course of the years.

Q. Are you acquainted with Mr. William Rusch?

A. Not that I know of.

Q. How about Mr. William Harrison?

A. Not that I know of.

Q. Did you work very closely with Mr. Sauter?

MR. ANDERSON: I object to the question as vague and ambiguous. What does very closely mean?

Q. You may answer the question.

A. I would say no.

Q. Did Mr. Sauter ever work directly under you?

A. Yes.

Q. During what period?

A. Shortly after I took over the management of the department until he left.

Q. And you took over the management of the department four or five years ago?

A. Approximately.

Q. Did Mr. Sauter work for anyone else during that time?

A. What do you mean?

Q. During the time that he was working under you.

A. What do you mean by working for someone else, administratively?

Q. Well, you stated he worked directly under you from the time shortly after you took over the management

of the department until he left.

A. Yes.

Q. Did he work directly under anybody else?

A. During that period, yes, he worked for Mal Lemaire.

Q. During the full time?

A. No, for the first, say, two years.

Q. Could you be a little more specific as to when you first became manager of the department?

A. I could check; I don't recall any more specifically than that. I could get the information for you, obviously.

MR. WELSH: I would like to have that information, Mr. Anderson.

MR. ANDERSON: All right; the date on which Mr. Frisbie was assigned to his present position?

MR. WELSH: Of systems software manager.

MR. ANDERSON: We will get that information for you. Can we just give you that information after Mr. Frisbie is gone on my representation that it is from the records of Sanders?



MR. WELSH: Yes, based on your representation.

MR. ANDERSON: All right.

Q. During that period when Mr. Sauter was working under you, did he discuss any work he was doing on programming Space War for any computer at Sanders?

A. Yes.

Q. When did he discuss that with you?

A. I guess about 1974 or '75.

Q. Did he say what computer he was working with?

A. The PDP-11.

Q. Did he seek your permission to do this work?

A. No.

Q. What did he say with respect to working on such a program?

A. That he had gotten a copy, a PDP-11 copy of the program and that he had modified it for the ADDS 500.

Q. Did he say where he got the program?

A. I don't recall.

Q. What is the ADDS 500?

A. It is a Sanders graphic display.

Q. Is that a point plotting type of display?

- A. How about vector? I am not that familiar with graphics technology, but if you mean by point, a series of points, it doesn't; it draws a vector from Point A to Point B. It is a continuous type.
- Q. Are you familiar with the raster scan type of display?
- A. I have heard the term, but raster scan doesn't conjure up anything for me.
- Q. Did Mr. Sauter say anything else with respect to the program for the PDP-11 on Space War?
- A. Such as?
- Q. Did he state whether he was suggesting that it be used as a demonstration program or a test program?
- A. Not that I recall.
- Q. Do you know whether in fact it has been used, the Space War program has been used, as a demonstration or test program for any hardware of Sanders?
- A. Not that I am aware of.
- Q. Did Mr. Sauter ever discuss giving a demonstration of Space War on the PDP-11 here at Sanders?
- A. What do you mean by demonstration, to outside

customers?

Q. Either to outside customers or people within Sanders such as members of the patent department?

A. No.

Q. Did he ever discuss giving a demonstration of the Space War program to anyone outside of Sanders?

A. Not that I recall.

Q. Did you receive a request to do anything further to supply information regarding Space War after that first period in October of 1975?

A. Not that I can recall.

Q. And did you furnish any information or documents or things after that time?

A. No.

MR. WELSH: That completes my examination of Mr. Frisbie.

MR. ANDERSON: Mr. Wright, do you have any examination of Mr. Frisbie?

MR. WRIGHT: No, I do not.

(Interrogatories by Mr. Anderson.)

Q. Mr. Frisbie, you stated, I believe that you saw a game being played on a TV monitor at Sears?

A. Yes.

Q. Approximately when did you say that that was?

A. Within the last year.

Q. Specifically what pieces of equipment do you recall seeing at that time involved in the game?

A. Some type of monitor and there was some type of a unit, something like a stick to manipulate or move the paddles.

Q. And did the stick extend from something?

A. Yes, some type of a small console. I don't remember it specifically.

Q. Did you at any time see the inside of the

A. console?

A. No. you ever investigated the wiring of the

Q. Did you at any time see the inside of the TV set

A. that you saw?

A. No. MR. ADAMSON: No further

Q. Did you investigate in any way the manner in which it was wired up? MR. WILSON: I have no further

A. No. May we have the same procedure or agree

Q. I think you also testified that you had seen a game played on a coin-operated machine at one time or another?

A. Yes. We would like to have you read the

Q. And approximately on how many occasions have you seen that? And and after you have read it and

A. Every time I go to that mall which is, you know, maybe a dozen times. It is accessible to you?

Q. What is the earliest recollection that you have of seeing a coin-operated game of that type played on a video display?

A. I can't really be specific, it has been several years. I had no occasion to remember the date.

Q. Have you at any time seen the inside of one of those coin-operated games?

A. No.

Q. Have you ever investigated the wiring or the circuitry of one of them?

A. No. We terminated Mr. Frisbie's deposition, he went and checked. MR. ANDERSON: No further cross-examination. MR. WELSH: I have no further direct. May we have the same procedure or agree to the same procedure with respect to his signing before any notary and making corrections?

MR. ANDERSON: All right.

Mr. Frisbie, we would like to have you read the

transcript of this testimony when the reporter has completed it; and after you have read it and made any necessary corrections, sign it before any Notary Public, is that acceptable to you?

THE WITNESS: Yes.

MR. ANDERSON: All right; let's agree to that procedure.

MR. WELSH: Agreed.

MR. ANDERSON: All right; you are excused.

(Whereupon, a recess was taken.)

MR. ANDERSON: Mr. Welsh, after we terminated Mr. Frisbie's deposition, he went and checked the record and he has just called on the phone and advised us that he assumed his present position as manager of corporate systems software division in October, 1971.

  
Deponent

THE STATE OF NEW HAMPSHIRE)

COUNTY OF Hillsborough) SS.

Subscribed and sworn to before me this 28th  
day of May 19 76.

Marilyn E. Trapalis  
~~Notary of the State 2nd/69~~  
Notary Public

Marilyn E. Trapalis

Notary Public

My Commission Expires March 19, 1980